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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/771,313

01/27/2001

Thomas Clyde Banwell

1237-US

7649

9941

7590

08/03/2004

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EXAMINER

STEVENS, ROBERTA A

ART UNIT

PAPER NUMBER

2665

7

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/771,313

**Applicant(s)**

BANWELL ET AL.

**Examiner**

Roberta A Stevens

**Art Unit**

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12–16, 18-20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kracht (U.S. 6377987 B1) in view of Cudak (U.S. 6058106).

3. Regarding claim 12 Kracht teaches a method for realizing the physical layer topology of a network comprising a plurality of distinct domains, comprising: storing an electronic serial number and model number for network elements of the distinct domain (col. 7 – col. 8, line 60); sending a request packet to a network element in one of the domains for use in a physical layer auto-discovery protocol, comprising a first packet protocol identifier (col. 8, line 61 – col. 10, line 55); receiving a response packet from the network element for use in a physical layer auto-discovery protocol, comprising a second packet protocol identifier, electronic serial number and model number of the network element (col. 8, line 61 – col. 10, line 55); and providing the response packet to a network management system common to all of the distinct domains (col. 13, line 59 – col. 14, line 35).

4. Kracht does not teach the packet comprising a sequence number.

5. Cudak teaches (cols. 29-30) a sequence number in the structure of information. It would have been obvious to one of ordinary skill in this art to adapt to Kracht's system Cudak's concept of sequence numbers to maintain order within the system's transmission of data.

6. Regarding claim 13, Cudak teaches (cols. 29-30) teaches padding.

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7. Regarding claims 14 and 18, Kracht teaches (figure 10) an optical network.
8. Regarding claims 15 and 19, Kracht teaches (col. 6) the physical layer auto-discovery protocol is done in a low layer in the protocol stack.
9. Regarding claims 16, 20 and 23, Kracht teaches (col. 14, lines 16 –35) the physical layer auto discovery is at the lowest layer in the stack, in order to be able to discover elements within all high-layered protocol domains.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 17, 21 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Kracht.
12. Regarding claim 17, Kracht teaches a system for realizing the physical layer topology of a network comprising a plurality of distinct domains, comprising: a network management system common to the plurality of distinct domains; means for identifying network elements in the domains by encoded serial and model numbers (col. 7 – col. 8, line 60); means responsive to a request for conducting a physical layer auto-discovery protocol for a network element in one of the domains (col. 8, line 61 – col. 10, line 55); means for receiving a response packet from one of the domains requested to conduct a physical auto-discovery protocol; and means for warding the

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response to the network management system (col. 7 – col. 8, line 60, col. 13, line 59 – col. 14, line 35).

13. Regarding claim 21, Kracht teaches a method for realizing the physical layer topology of a network comprising a plurality of distinct domains and a network management system common to the distinct domains, comprising: uniquely identifying network elements in the domains (col. 7 – col. 8, line 60); sending a request packet to one of the domains; conducting a physical layer auto-discovery at a low level in the protocol stack at the one domain for a specific network element at the one domain in response to the request packet (col. 8, line 61 – col. 10, line 55 and col. 8, line 61 – col. 10, line 55); forwarding a response packet from the one domain; and providing the response packet to the network management system (col. 13, line 59 – col. 14, line 35).

14. Regarding claim 22, Kracht teaches (col. 7 – col. 8, line 60) electronically storing the serial and model numbers of the network elements.

### ***Conclusion***

15. Any inquiry concerning the communication or earlier communications from the examiner should be directed to Roberta Stevens whose telephone number is (703) 308-6607. The examiner can normally be reached on Monday through Friday from 9:00 am to 5:30 p.m.

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16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached on (703) 308-6602.

17. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

18. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:** (703) 872-9306

For informal draft communications, please label "PROPOSED" or "DRAFT"

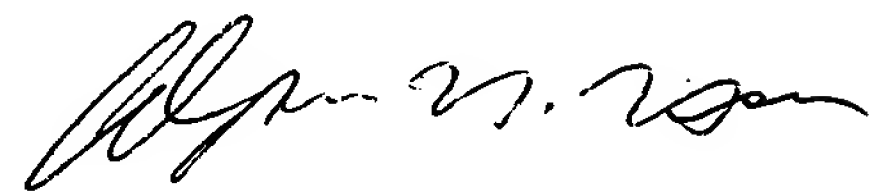
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA. Sixth Floor (Receptionist).

Roberta A. Stevens

Patent Examiner

07-16-04



ALPUS H. HSU  
PRIMARY EXAMINER